

AMENDMENT TO THE CLAIMS:

1. (Withdrawn) A capacitor comprising:
a first electrode made of a metal;
a second electrode made of a conductor; and
a capacitive insulating film existing between the first and second electrodes,
wherein the first electrode has been doped with impurity atoms that suppress decrease in stiffness of the first electrode at a high temperature.
2. (Withdrawn) The capacitor of Claim 1, wherein the first electrode is made of a platinum noble metal.
3. (Withdrawn) The capacitor of Claim 1, wherein the impurity atoms are hydrogen atoms.
4. (Withdrawn) The capacitor of Claim 1, wherein the first electrode has a thickness of 100 mu or less at the thinnest part thereof.
5. (Withdrawn) The capacitor of Claim 1, wherein the capacitive insulating film is a dielectric film made of an oxide.
6. (Withdrawn) The capacitor of Claim 1, wherein the second electrode has been doped with impurity atoms that suppress decrease in stiffness of the second electrode at a high temperature.
7. (Withdrawn) A capacitor comprising:
a first electrode made of a noble metal or a refractory metal;
a second electrode made of a conductor; and
a capacitive insulating film existing between the first and second electrodes,
wherein the first electrode contains hydrogen.
8. (Withdrawn) The capacitor of Claim 7, wherein the first electrode has a thickness of 100 nm or less at the thinnest part thereof.
9. (Withdrawn) The capacitor of Claim 8, wherein the capacitive insulating film is a dielectric film made of an oxide.
- 10-37. (Cancelled)
38. (Currently Amended) A method for fabricating a semiconductor device, the method comprising the steps of:

- a) forming a metal lower electrode on a substrate;
- b) annealing the metal lower electrode in a reducing atmosphere that contains impurity atoms;
- c) forming a capacitive insulating film on the metal lower electrode after the step b); and
- d) forming an upper electrode on the capacitive insulating film, wherein the impurity atoms are introduced into the metal lower electrode in the step b.

39. (Previously Presented) The method of Claim 38, wherein the impurity atoms are hydrogen atoms.

40. (Previously Presented) The method of Claim 38, wherein the annealing process is performed in an argon atmosphere containing hydrogen.

41. (Currently Amended) The method of Claim 38, further comprising steps of forming an insulating film on the substrate and forming a recess on the insulating film before the step a),

wherein the metal lower electrode is formed in the recess in the step b).

42. (Currently Amended) The method of Claim 40, further comprising steps of forming an insulating film on the substrate and forming a recess in the insulating film before the step a),

wherein the metal lower electrode is formed in the recess in the step b).

43. (Currently Amended) The method of Claim 38, wherein the metal lower electrode has a thickness of 100 nm or less at the thinnest part thereof.

44. (Previously Presented) The method of Claim 38, wherein the capacitive insulating film is formed in an oxidizing atmosphere in the step c).

45. (Previously Presented) The method of Claim 38, further comprising a step of crystallizing the capacitive insulating film by a heat treatment after the step c) and before the step d).

46. (Currently Amended) The method of Claim 38, wherein the metal lower electrode is made of a noble metal.

47. (Currently Amended) The method of Claim 38, wherein the metal lower electrode is made of a refractory metal.

48. (Currently Amended) The method of Claim 38, wherein the metal lower electrode is composed of Pt.

49. (Currently Amended) The method of Claim 38, wherein the metal lower electrode is composed of Ir.

50. (Currently Amended) The method of Claim 38, wherein the metal lower electrode is composed of Ru.

51. (Currently Amended) The method of Claim 38, wherein the metal lower electrode is composed of Rh.

52. (Previously Presented) The method of Claim 38, wherein the capacitive insulating film is an insulating film made of an oxide.

53. (Previously Presented) The method of Claim 38, wherein the capacitive insulating film is composed of BST.

54. (Previously Presented) The method of Claim 38, wherein the capacitive insulating film is composed of SBT.

55. (Previously Presented) The method of Claim 38, wherein the capacitive insulating film is composed of PZT.

56. (Previously Presented) The method of Claim 38, wherein the capacitive insulating film is composed of Ta₂O₅.

57. (Currently Amended) The method of Claim 38, wherein the metal lower electrode is composed of Ru and the capacitive insulating film is composed of Ta₂O₅.

58. (Currently Amended) The method of Claim 38, wherein the metal lower electrode is composed of Ir and the capacitive insulating film is composed of SBT.

59. (Currently Amended) The method of Claim 38, wherein the metal lower electrode is composed of Ir and the capacitive insulating film is composed of PZT.

60. (New) The method of claim 38, wherein the annealing process is performed at the temperature of 450 - 500°C.